

Aerial Detection Survey – Update, Aug 10th, 2012

Background: Annual aerial detection surveys for tree injury and mortality have been conducted in California since 1994. This is an update of survey status for the 2012 survey season for Aug 10th, 2012.

Objective: Detect and map tree mortality and damage in California / USFS Region 5 and detect tanoak mortality in Del Norte County.

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Dates: August 8 to 10th, 2012.

Methodology: Recently dead or injured trees (trees still retaining dead foliage) were mapped visually by surveyors using digital aerial sketch-mapping systems flying in a light fixed-wing aircraft approximately 1,000 feet above ground level. Surveyors record the number and species of affected trees and type of damage (mortality, defoliation, branch flagging) at each mapped location.

Details:

- 2,210 miles were flown, covering 4.3 million acres. Privately-owned forest lands in Del Norte and Humboldt County, as well as the Redwood National and State Parks, the Six Rivers National Forest and much of the Klamath National Forest was surveyed. See Figure 1.
- Del Norte County was flown specifically to map tanoak mortality to target for ground checks for sudden oak death (SOD). No tanoak mortality was detected in Del Norte County this year.
- The SOD infestation in southern Humboldt was also surveyed. Large areas with tanoak mortality were observed, especially on the eastern extent of the infestation. See Figure 2.
- Bear damage, mostly in Douglas-fir plantations, was evident throughout Humboldt and Del Norte Counties, and comprised the majority of damage mapped on the Six Rivers National Forest.
- Large areas of mountain pine beetle activity were observed on the Goosenest Ranger District in the east side of the Klamath National Forest. See Figure 3.
- Areas of red fir mortality and severe flagging from Cytospora canker were observed in the western portions of the Klamath National Forest. Many of the areas with mortality were associated with burned areas from 2008 and 2009.

Figure 1. Flown area and mapped oak mortality

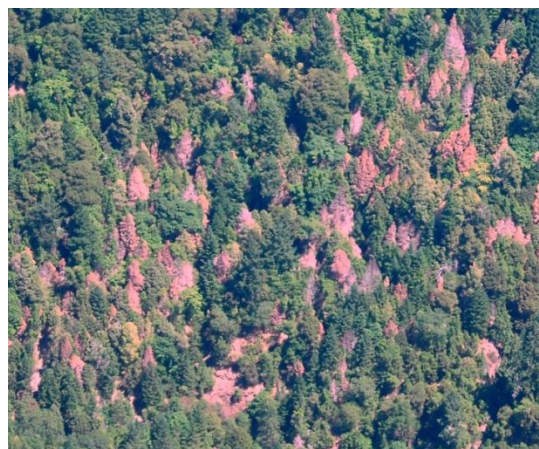
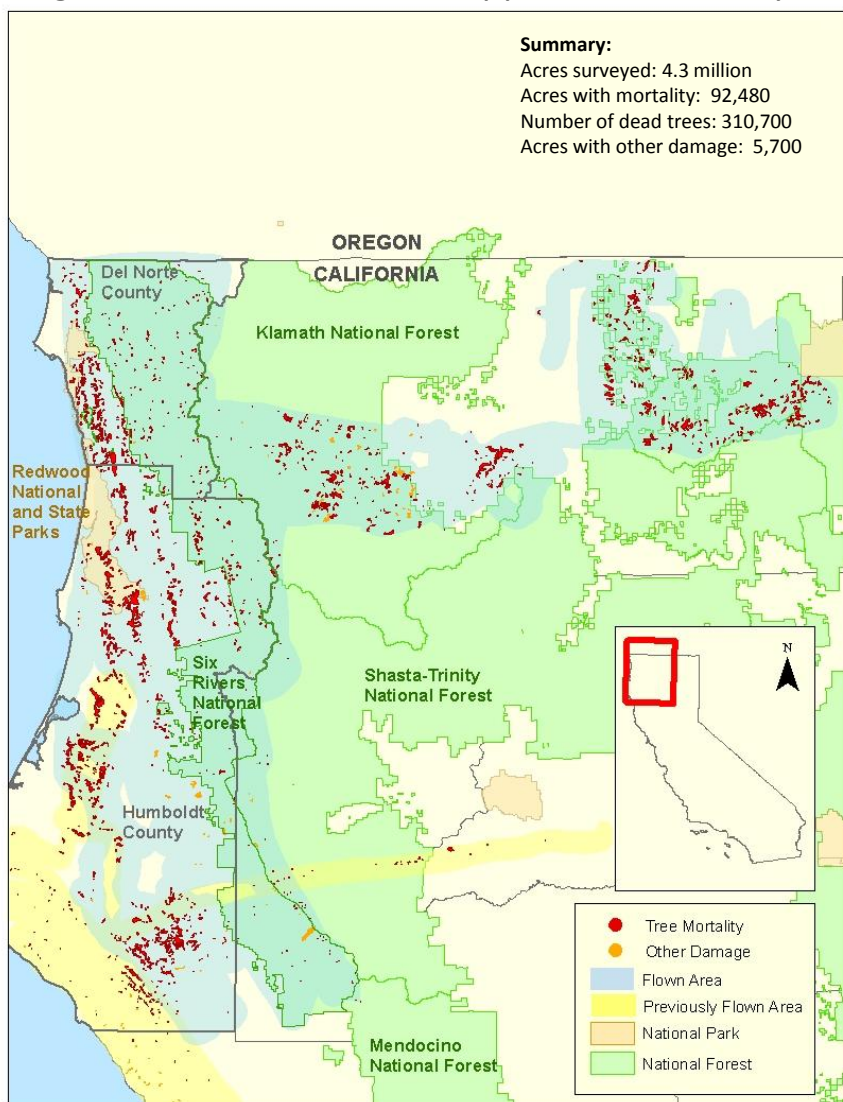


Figure 2. Tanoak mortality in southern Humboldt County.



Figure 3. Lodgepole mortality on the Goosenest District, Klamath National Forest

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